

Product datasheet for **MR209040**

Nploc4 (NM_199469) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Nploc4
Synonyms:	AK129375; mKIAA1499; Npl4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >MR209040 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGCCGAGAGCATCATAATCCGTGTCCAGTCCCCTGATGGCGTGAAGAGGATCACAGCTACGAAGAGAG
 AGACGGCTGCCACCTTCCTGAAAAAGGTTGCAAAGGAGTTTGGCTTCCAAAACAACGGCTTCTCAGTTTA
 CATCAATAGAAACAAGACTGGAGAGATAACAGCATCGTCCAGCAAAATCCCTCCATTTGCTAAAAATCAAG
 CATGGCGATTTGTTGTTCTGTTTCCCTCAAGCCTTGTGGACCCCTCGTCTGAAATGGAACATCGACCT
 CGGTAGGGTTAAAGGCCTTTGGTGCTCCTAACGTGGTTGAAGATGAGATCGATCAATACCTCAGCAAGCA
 GGATGGGAAGATTACCGGAGCCGAGACCCACAGCTATGCCGCCATGGTCCCTTGGGCAAGTGTGTGCAT
 TGTGTCCCACTGGAGCCATTTGATGAGGACTATCTGAACCACTTGAGGCCTCCTGTGAAGCACATGTCCT
 TCCATGCCTACATCCGGAAGCTGACTGGAGGGGCTGACAAGGTAAGTTTGTGGCCCTGGAGAACATCAG
 CTGCAAGATTAAGTCAGGGTGTGAGGGACACCTCCATGGCCAAATGGTATCTGCACCAAAATGCCAGCCC
 AGTGCCATCAGCTGAACAGACAGAAATACCGACACGTGGACAACATCATGTTTGAGAATCATACTGTTG
 CTGACCGCTTCCTTGACTTCTGGAGAAAGACCGGAAACCAGCATTTTGGGTACTTATACGGACGGTACAC
 AGAGCACAAGGACATTCCTCGGCATCAGGGCTGAAGTGGCTGCAATTAACGAGCCTCCTCAGATTGGT
 ACACAGAACAGTCTGGAGCTTCTGGAAGACCCGAAAGCTGAGTGGTTGACGAGATTGCCGCCAACTTG
 GCCTGAGGAAGGTTGGATGGATATTACCGACCTTGTCTCAGAAGACACCCGAAAGGGTACAGTCCGATA
 CAGTCGGAATAAGGACACCTATTTCTGAGTTCAGAAGAATGCATCACTGCAGGAGACTTTCAAACAAG
 CACCCCAACATTTGCCGCTCTCTCCGATGGTCATTTTGGATCCAAGTTTGTACTGCAGTGGCCACAG
 GTGGTCTGACAACCAGGTTCACTTTGAAGGTACCAGGTATCCAATCAGTGCATGGCACTAGTCCGAGA
 TGAGTGTCTTCTACCTTGAAGGATGCCCCGTGAGCTTGGCTATGCTAAGGAGTCCAGCAGTGAGCAGTAT
 GTTCCTGATGTGTTTTATAAGGACATAGACAAGTTTGGCAATGAGATCACCCAGCTGGCCCGTCCCTGC
 CTGTGGAGTATCTCATCATAGATGACTTCCATAGTTTGGCCACCTACTTGTCCAGAATACCTCATCCGT
 GTTCTTGGATACCATTTCCGACTTCCATCTCCTGCTGTTTCTGGTCAACATGAAGTCATGCCGCTGCAG
 GACAGTATCAGCCTGCTGCTAGAAGCCGTGAGGACCAGAAATGAGGAGCTAGCACAGACATGGAAAAAGT
 CTGAACAGTGGGCCACCATTTGAGCAGTTATGCAGCACCGTTGGTGTGCAGCTCCAGGCCTCCACAGATT
 TGGTGCAGTCGGGGGCTCTGCACGCTGCTACCTCTGCCATGTGGGCTGTGCAGCTGCACCTTCATG
 AACCACTGGCACAGGCCACTGCGAGATGTGCAGCCTCCCCGGACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR209040 protein sequence
 Red=Cloning site Green=Tags(s)

MAESIIIRVQSPDGVKRITATKRETAATFLKKVAKEFGFQNNGFSVYINRNKTGEITASSSKSLHLLKIK
 HGDLLFLFPSSLAGPSSEMETSTSVGLKAFGAPNVVEDEIDQYLSKQDGKIYRSRDPQLCRHGPLGKCVH
 CVPLEPFDELYLNHLEPPVKHMSFHAYIRKLTGGADKGFVALENISCKIKSGCEGHLPPWPNGICTKQCP
 SAITLNRQKYRHVDNIMFENHTVADRFLDFWRKTGNQHFYLYGRYTEHKDIPLGIRAEVAAIYEPPQIG
 TQNSLELLEDPKAEVVDEIAAKLGLRKVGWIFDLVSEDTRKGTVRYSRNKDTYFLSSEECITAGDFQNK
 HPNICRLSPDGHFGSKFVTAVATGGPDNQVHFEQYQVSNQCMALVRDECLLPCKDAPELGYAKESSEQY
 VPDVFYKIDKFGNEITQLARPLPVEYLIIDDFHSLATYLSQNTSSVFLDTISDFHLLFLVTNEVMPLQ
 DSISLILLEAVRTRNEELAQTWKKSEQWATIEQLCSTVGVLPLGHEFGAVGGSARAATSAMWACQHCTFM
 NQPGTGHCMLPRT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_199469

ORF Size: 1728 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

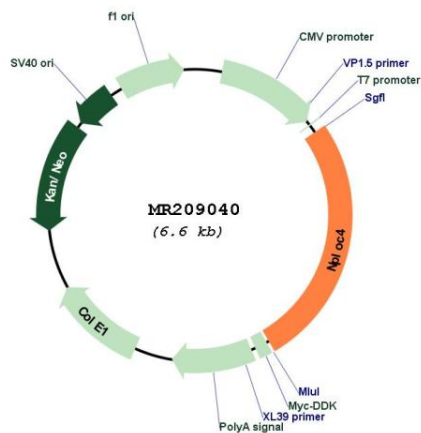
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_199469.2](#)

RefSeq Size:	4589 bp
RefSeq ORF:	1731 bp
Locus ID:	217365
UniProt ID:	P60670
Cytogenetics:	11 E2
MW:	64.4 kDa

Gene Summary: The ternary complex containing UFD1, VCP and NPLOC4 binds ubiquitinated proteins and is necessary for the export of misfolded proteins from the ER to the cytoplasm, where they are degraded by the proteasome. The NPLOC4-UFD1-VCP complex regulates spindle disassembly at the end of mitosis and is necessary for the formation of a closed nuclear envelope (By similarity). Acts as a negative regulator of type I interferon production via the complex formed with VCP and UFD1, which binds to DDX58/RIG-I and recruits RNF125 to promote ubiquitination and degradation of DDX58/RIG-I (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR209040